

REMARKS

Favorable reconsideration and allowance of the present application is respectfully requested.

Currently, claims 62-81, including independent claim 62, are pending in the present application. In the Office Action, previous independent claim 42 was rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,867,051 to Anderson, et al. Anderson, et al. is directed to a point of care system for medical diagnosis of a patient. The system includes an instrument for reading or evaluating test data and software for converting the data into information. For example, the system may include a test strip optionally encased in a housing. The device also includes bar code information that is used to associate identifying information (e.g., intensity value, standard curve, etc.). The reader in the system may be adapted to read the labels on the test strip and the bar code information. (Col. 2). One embodiment of the system is shown in perspective in Fig. 7. Specifically, a reader 600 is shown that has a reader head assembly 704 and a cassette slot 602 located at a front edge of a lower housing 702. When an immunoassay device 200 is inserted into the slot 602, the reader head assembly 704 is positioned directly above the device 200. (Col. 18). To read the strip, the reader head is brought within a certain distance of the strip. (Col. 19).

Anderson, et al., however, fails to disclose various aspects of the present claims. For instance, the system of independent claim 62 requires a lateral flow membrane strip and a reading device. The reading device contains a housing within which is contained an electromagnetic radiation source and a sensor capable of detecting the intensity of electromagnetic radiation. In addition, independent claim 62 requires a "light barrier

structure” positioned adjacent to an exterior surface of the housing. The light barrier structure defines a receiving port between a top plate and bottom plate for insertion with the membrane strip. Further, the bottom plate of the light barrier structure defines a region through which electromagnetic radiation from the source is capable of passing before contacting the lateral flow membrane strip. The region approximates the size of the detection zone.

Many conventional lateral flow strip reading devices have a low signal to noise ratio, which is caused in part by the introduction of excess amounts of stray or ambient light into the viewing window. One particular benefit of the “light barrier structure” of the present claims is that it helps minimize the total area through which light is allowed to pass, thereby optimizing the signal to noise ratio. In the embodiment shown in Figs. 3-4 of the present application, for instance, the bottom plate 56 and top plate 50 define a receiving port 53 through which the lateral flow membrane strip may be inserted. Upon insertion, light generated by a source is capable of passing through an aperture 54 to contact the strip. Light reflected by the strip may also pass through the aperture 54. Due to the size of the aperture relative to the detection zone, the total area through which light is allowed to pass is minimized, thereby optimizing the signal to noise ratio.

Anderson, et al. simply does not disclose a reading device that contains a “light barrier structure” having the particular configuration required by independent claim 62. As shown in Fig. 7, for instance, the lateral flow strip is actually inserted into the same housing (e.g., housing 702) within which the reader head assembly 704 is located. There is simply no light barrier structure that contains a plate positioned adjacent to the exterior surface of the housing. Thus, for at least the reasons set forth above,

Applicants respectfully submit that the present claims patentably define over Anderson, et al.

In the Office Action, independent claim 62 was also rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,837,546 to Allen, et al. Allen, et al. is directed to an assay device for determining the presence of one or more analytes. However, Allen, et al. suffers from the same deficiencies as Anderson, et al. in that it fails to disclosed the "light barrier structure" as set forth in independent claim 62. For at least this reason, Applicants respectfully submit that the present claims patentably define over Allen, et al.

Claims 26-50 were also provisionally rejected in the Office Action under the judicially created doctrine of obviousness-type double patenting in view of copending applications 10/013,973, 10/026,415, and 10/084,763. In response, Applicants agree to submit terminal disclaimers, to the extent necessary to obviate this rejection, at such time that the present application is otherwise deemed in condition for allowance.

It is believed that the present application is in complete condition for allowance and favorable action is respectfully requested. Examiner Alexander is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this Amendment. Please charge any fees required by this Amendment to Deposit Account No. 04-1403.

Respectfully submitted,

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